

INFOSYS BPO CAMPUS AT JAIPUR





CAMPUS

- Site area : 42 Acres.
- The Overall proposal for the entire campus consists of 5 BPO buildings, 3 Food courts and 500 rooms ECC along with all the utility buildings.
- The campus is designed to accommodate a total of 12,100 employees with an overall built-up area of 14,05, 000 sq.ft.
- Phase I construction includes BPO-1, Food Court-1 and the utility buildings.
- This campus is designed with a focus on Energy Saving strategies.

BPO

- Total area is 2, 90,000 sq.ft.
- G+ 4 structure with a capacity of 3320 persons
- The foot print area of this building is 54,000 sq.ft. approximately.



FOODCOURT

- The overall built-up area of the food court is 85,000 sq.ft
- Designed as G+ 2 structures
- Seating capacity of 1900 persons, accommodating 600 persons in each floor approximately.



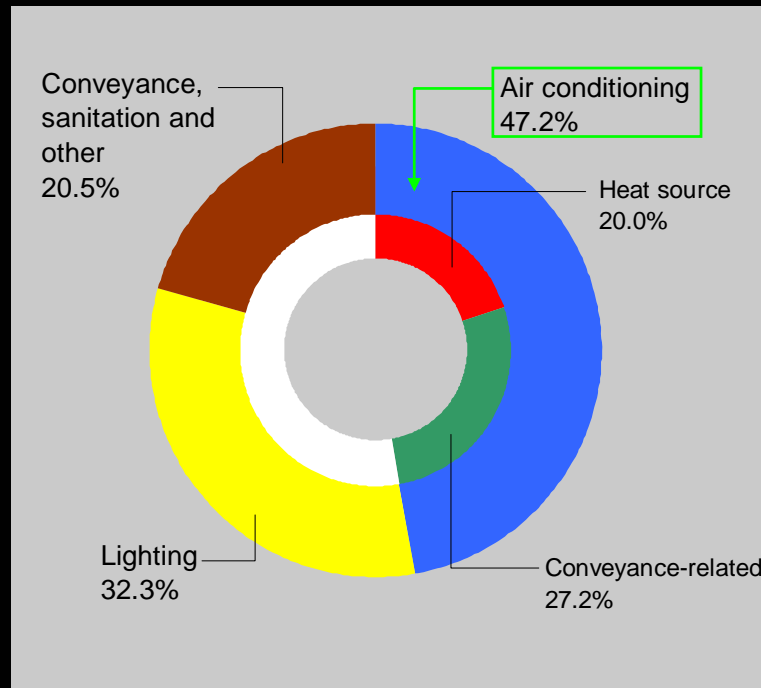
Energy save on active energy and embodied energy; engineering active and passive elements for energy saving

Earth preserve and support the local ecology; promote afforestation; promote use of natural materials

Water harvest water available on site; efficient water management

Air passive and active cooling systems that are energy-efficient and ozone non-depleting and enhance indoor air quality





- Central energy center to serve all the buildings, so that further diversity can be applied on the peak cooling load.

- Total Peak cooling load for the entire campus is 4400 TR.

- Total Day – 1 Cooling load requirement -Phase 1: 1615 TR.

- 2 x 800 TR and 2 x 400 TR (standby) for the total installed capacity for Day -1 will be 2400 TR.

- Remaining 2000 TR will be served with 2 x 1000 TR Chillers. The chillers will be of water cooled centrifugal chillers with variable frequency drives.

- Cooling water can be made available through STP.

- Dedicated units for Conference rooms, meeting room, Training rooms will be recommended to optimize the operation of Air Conditioning System.

- Server rooms are air conditioned with Precision Units with Air Cooled Baby Chillers.

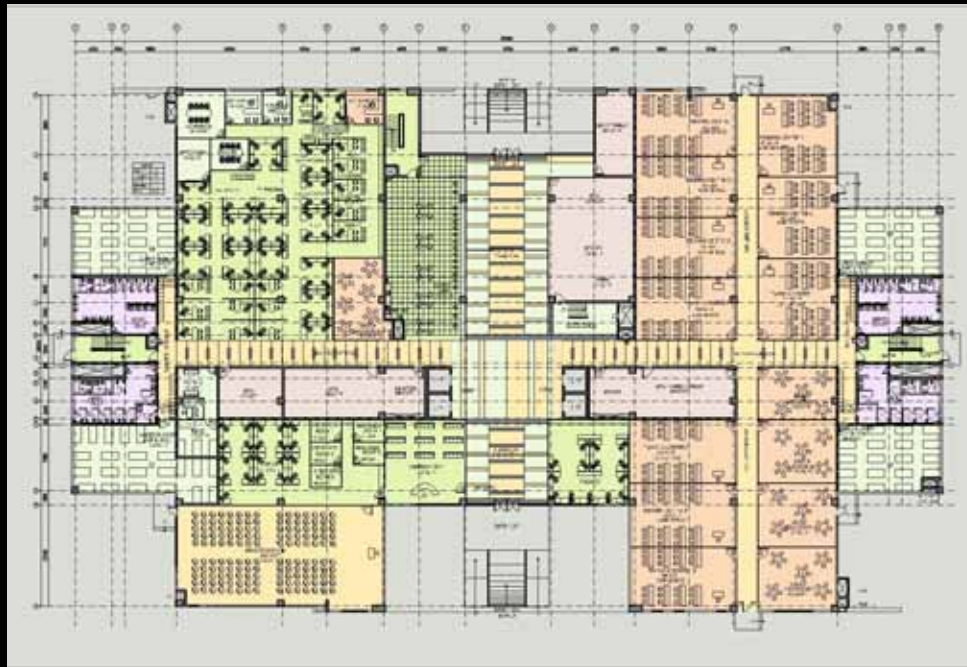
Minimum area of glazing reduces the heat gain inside the building there by reducing the A/C load. The percentage of Glass used on overall Façade area is only 17%

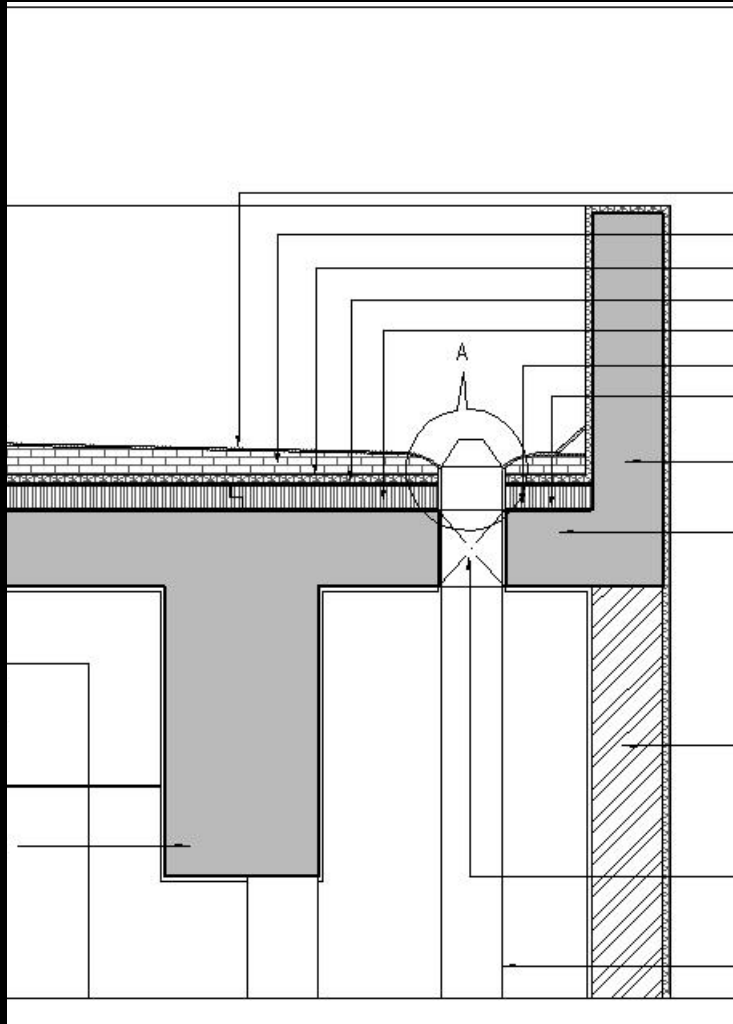
Recessed windows were widely used to cut the thermal gain both during the day and night

Compact plan with solids and voids on the sides and rear elevations- less exterior wall exposed to sun. Minimum P/A ratio of building.

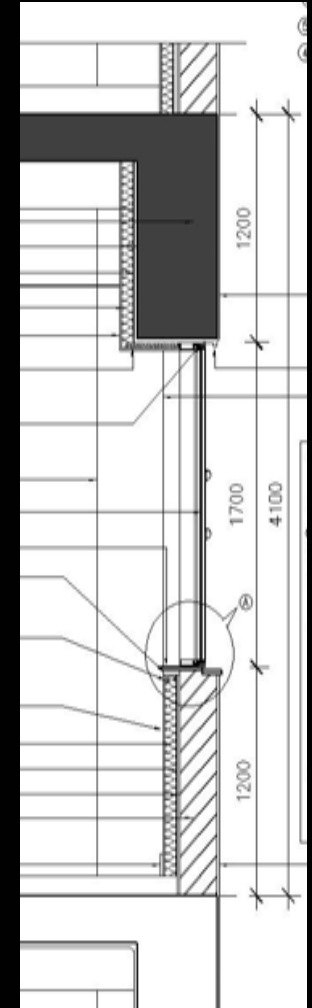
Solar heat gain from direct sunlight is minimized by careful zoning and orientation

Use of renewable solar power amounting to 2.5 lakhs units per annum through Photovoltaic Cell





- Insulation in walls and Over deck Insulation on roof.
- High performance glazing
- Energy efficient lighting design
- Occupancy Sensors.
- Energy Efficient Variable Frequency Driven Water Cooled Screw Chillers
- Variable air volume systems. Air Handling Units with Variable Frequency Drives
- Primary and secondary chilled water pumps with Variable Frequency Drive
- Air Economizer. Heat Recovery Systems
- Double stage evaporative pre-cooling system.





- Top soil has been preserved
- Specific use of rapidly renewable materials (materials with life harvest cycle of less than 10 years) to reduce the depletion of finite raw materials
- More than 10% of materials used have high recycled content thereby reducing impacts resulting from extraction and processing of virgin materials
- Use of regionally manufactured materials to reduce the impact of environmental pollution through transportation
- Certified wood products used to encourage environmentally responsible forest management

Comprehensive recycling policy to collect, segregate and store all recycled materials such as paper, plastic, glass, metals etc.





WATER HARVESTING

Measures are taken to harvest at least 100% of the annual catchment. This is achieved by means of efficient rainwater harvesting, storm water management and incorporating large swales and holding ponds into the landscape.

WATER MANAGEMENT

This involves improving the efficiency of water usage by means of water saving fittings and fixtures. Dual flush systems, taps fitted with aerators and water meters help in controlling the usage of water.

WATER TREATMENT

The water that is used on site goes through various stages of treatment before it leaves the site. The grey water from wash basins is treated and used for flushing. The black water from water closets is treated and then used for irrigation.



- Open landscaped space more than the building footprint to promote biodiversity
- Site coverage is less than 20%
- 100% of waste water treated at site to tertiary standards
- No potable water used for the entire landscaping
- Over 35% savings in water annually by use of high efficiency and low flow water fixtures
- Automatic sensors



Water

- Use of low VOC adhesives and sealants, paints, carpet and composite wood products to reduce indoor air contaminants and provide superior indoor environment
- High efficiency entrance mats at all building entries and independent exhaust systems for pantry, housekeeping and chemical areas to reduce indoor pollutant source control
- Use of environment friendly refrigerant that reduces ozone depletion and global warming
- Increased outdoor air ventilation rates and Co2 monitoring for enhanced occupant comfort





CR NARAYANA RAO



THANK YOU